

REMARKS

The claims remaining in the application are claims 1-6, 11-12 and 14-15. As the examiner pointed out, claims 1-6, 11-12 and 14-15 were "use" claims. These claims have now been converted to proper method claims. Claims 7-10 and 13 have been canceled.

It is urged that the claims presently in the case are patentably distinct from the art of record.

The prior art references relied upon by the examiner do not disclose a method for increasing the bioavailability of mineral salts. There is no such suggestion or teaching of applicants' invention in the references.

Favorable reconsideration by the examiner is solicited.

Applicants will request the patent draftsman to correct the drawings as soon as a claim or claims have been allowed.

**A check in the amount of \$110.00 is attached to cover the required one month extension fee.**

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 11-0345. Please credit any excess fees to such deposit account.

Respectfully submitted,

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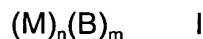


**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

Cancel claims 7-10 and 13.

Amend claims 1-6, 11, 12, 14 and 15 as follows:

1. (amended) [The use of  $\alpha$ -lipoic acid or  $\alpha$ -dihydrolipoic acid for] The method of  
increasing the bioavailability of mineral salts which comprises combining said  
salts and  $\alpha$ -lipoic acid or an  $\alpha$ -dihydrolipoic acid.
2. (amended) [The use as claimed in] The method of claim 1, wherein at least one  
mineral salt is [used in combination] combined with  $\alpha$ -lipoic acid or  $\alpha$ -  
dihydrolipoic acid.
3. (amended) The [use as claimed in] method of claim 2, wherein the mineral salts [of]  
have the formula I [are used],



where

M is a monovalent to trivalent physiologically acceptable metal cation,

B is a monovalent to trivalent physiologically acceptable anion,

n is 1, 2 or 3 and

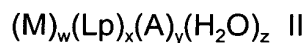
m is 1, 2 or 3,

where the subscripts n and m correspond to the valency and charge equalization  
of the mineral salt of the formula I.

4. (twice amended) The [use as claimed in] method of claim 1, wherein the combination  
[used] is metal  $\alpha$ -lipoates, metal  $\alpha$ -dihydrolipoates or metal-  $\alpha$ -lipoic acid

complexes.

5. The [use as claimed in] method of claim 4, wherein the combination [used] is metal  $\alpha$ -lipoates, metal  $\alpha$ -dihydrolipoates or metal-  $\alpha$ -lipoic acid complexes of the formula II,



where

- M is a monovalent to trivalent physiologically acceptable metal cation or a mixture of monovalent to trivalent physiologically acceptable metal cations,
- Lp is racemic  $\alpha$ -lipoic acid or  $\alpha$ -dihydrolipoic acid, (R)- or (S)- $\alpha$ -lipoic acid or (R)- or (S)- $\alpha$ -dihydrolipoic acid, racemic  $\alpha$ -lipoate or dihydro- $\alpha$ -lipoate or (R)- or (S)- $\alpha$ -lipoate or (R)- or (S)-dihydro- $\alpha$ -lipoate,
- A is a physiologically acceptable monovalent or divalent anion,
- w is 1 or 2
- x is 1, 2, 3 or 4,
- y is 0, 1, 2 or 3 and
- z is 0, 1, 2, 3, 4, 5 or 6,

where the subscripts w, x and y correspond to the valency and charge equalization of the compound of the formula II.

6. (twice amended) The [use as claimed in] method of claim 1, wherein the  $\alpha$ -lipoic acid [used] is R- $\alpha$ -lipoic acid or the  $\alpha$ -lipoate [used] is (R)- $\alpha$ -lipoate.

11. (amended) [The use of the] A method of increasing the bioavailability of mineral salts in feedstuff or food supplements which comprises adding to said feedstuff or food supplements an effective amount of the metal  $\alpha$ -lipoates, metal  $\alpha$ -dihydrolipoates or metal- $\alpha$ -lipoic acid complexes [as claimed] defined in claim 5 [as feedstuff or food supplements].
12. (amended) [The use of the] A method of improving cosmetic formulations which comprises adding to said formulations an effective amount of the metal  $\alpha$ -lipoates, metal  $\alpha$ -dihydrolipoates or metal- $\alpha$ -lipoic acid complexes [as claimed] defined in claim 5 [in cosmetic formulations].
14. (amended) [The use of the] A method of improving drugs that are used to treat disorders in which lipoic acid has a therapeutic or prophylactic effect and in which there is a mineral salt deficiency which comprises adding to said drugs an effective amount of the metal  $\alpha$ -lipoates, metal  $\alpha$ -dihydrolipoates or metal- $\alpha$ -lipoic acid complexes [as claimed] defined in claim 5 [for preparing a drug for treating disorders in which lipoic acid has a therapeutic or prophylactic effect and there is a mineral salt deficiency].
15. (amended) [The use of the] A method of improving compositions for treating diabetes, tumors, HIV infections, AIDS, renal insufficiency, malnutrition, protein-energy malnutrition and mineral deficiencies which comprises adding to said compositions an effective amount of the metal  $\alpha$ -lipoates, metal  $\alpha$ -dihydrolipoates or metal- $\alpha$ -lipoic acid complexes [as claimed] defined in claim 5

[for treating diabetes, tumors, HIV infections, AIDS, renal insufficiency, malnutrition, protein-energy malnutrition and mineral deficiencies].